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ABSTRACT

The fear of success (FOS) construct in the achievement motivation of women was initially written by undergraduates in which the opening sentence described a male or female who ranked first in a medical school class. From these results, an intrapsychic interpretation of FOS was made. Other researchers, who accepted the sex of the cue character as the critical variable, found cultural interpretations. Research examining the variable of cue characters at different positions in class standings has found that both success and failure in competitive achievement situations are differentially perceived and evaluated according to sex and to the degree of success or failure obtained. Studies using such ambiguous cues question the prevalence of FOS imagery. Several "objective" instruments have been developed to tap FOS, e.g., true-false scales, semantic differential items, interview questions, and situation-specific items. Measure reliability and validity of these new tests indicate that each test has its own limitations. Methodological, conceptual, and statistical flaws inherent in FOS research preclude labeling FOS as a motive or a proven personality trait. (NRB)

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Psychometric Properties and Underlying Assumptions of Four Objective Measures of Fear of Success

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Paper presented at the 53rd Annual Meeting of the Midwestern Psychological Association, Detroit, Michigan, May 1, 1981.

Abstract

The present paper reviews several new tests of "fear of success" in terms of their underlying theoretical assumptions, measure reliability, and validity. A discussion of the reality status of the fear of success construct is also presented. It is concluded that it would be premature to switch to any of the newer techniques. Each has its own limitations and should not be so widely accepted until a sound and replicable body of research exists.

2B

Nearly 30 years have passed since McClelland, Atkinson, Clark, and Lowell published The Achievement Motive (1953) and the research on need for achievement is still proceeding along several dimensions. One popular contemporary vector is the motive to avoid success or fear of success (FOS) construct introduced by Horner (1968) in order to "fill a gap" in the understanding of achievement motivation, particularly among women. Horner argued that in competitive achievement situations, especially those in which important men (i.e., prospective dates; boyfriends) are present, success-seeking women of high ability have not only (a) a motive to approach success and (b) a motive to avoid failure, but also (c) a motive to become anxious about being successful: a motive to avoid success. Such a motive was present because of the expectation of negative consequences as a result of succeeding (i.e., loss of femininity, social rejection, and disapproval). As Horner (1969, p. 38) pointed out:

> A bright woman is caught in a double bind. In testing and other achievement-oriented situations, she worries not only about failure but also about success. If she fails, she is not living up to her own standards of performance; if she succeeds, she is not living up to societal expectations about the female role.

Horner's provocative explanation based on a dramatic experiment has, indeed, replaced penis envy as the most widely accepted psychological construct for understanding the behavior of women. FOS has been related to increased premenstrual stress (Patty & Ferrell, 1974), an external locus of control (Midgley & Abrams, 1974), altered career plans (Schwenn, Note 1), and increased fertility (Hoffman, 1977).

FOS has been accepted as a proven personality trait and has worked its way into standard sources as Gospel. However, Horner's findings are not as robust as originally assumed (Zanna, Note 2). Several of the original conceptions of FOS have not been supported by empirical data. As Tresemer (1974) pointed out in his review of Horner's study, the intuitive appeal of FOS has resulted in a tendency to regard the concept as proven and to overlook its many complexities. Zuckerman and Wheeler's (1975) critical review of FOS concluded that a good poker player would not call a bet concerning the construct. Indeed, Helen Thompson Wooley's (1910) appraisal of the quality of the research on sex differences applies to today's treatment of FOS:

> There is perhaps no field aspiring to be scientific where flagrant personal bias, logic martyred in the cause of supporting a prejudice, unfounded in assertions, and even sentimental rot and drivel, have run riot to such an extent as here.

Since the advent of the numerous reviews of the methodological, statistical, and conceptual problems with Horner's study, (e.g., Tresemer, 1974; 1977; Zuckerman & Wheeler, 1975), researchers have taken several new directions in studying the FOS construct. This state of affairs calls for a critical appraisal of the current state of the art. The present paper reviews the problems and proposed solutions to these problems raised by Horner's and subsequent studies concerning FOS in terms of the measurement techniques employed, measure reliability, measure validity, and the reality status of the FOS construct.

MEASUREMENT OF FOS

In order to exhibit the FOS motive as operating in women and not in men, Horner gave undergraduate students the opening sentence of a story they were to complete. Women were administered the following cue: "After first term

finals, Anne finds herself at the top of her medical school class." For the men, the verbal lead was the same except that the cue character's name was given as "John" and "her" was changed to "his." Horner (1968, p. 105) wrote:

> Any of the following types of imagery was scored as fear of success:
>
> a. negative consequences because of the success;
> b. anticipation of negative consequences because of the success;
> c. negative affect because of the success;
> d. instrumental activity away from present or future success, including leaving the field for more traditional female work such as nursing, school teaching, or social work;
> e. any direct expression of conflict about success.
>
> Also scored was evidence of:
>
> f. denial of the situation described by the cue;
> g. bizarre, inappropriate, unrealistic or non-adaptive responses to the situation described by the cue.

Employing this scoring system, Horner observed differences between men and women in the kinds of responses they made to the projective cue. Women projected significantly more evidence of FOS than did men: 65% vs. 9%.

Horner reasoned that sensitivity to the sex of the cue character served to distort judgment and prejudice women against the success of another woman. By relying on the McClelland and Atkinson approach to motivation, Horner accepted the view, advanced in psychoanalytic writings, that motives are developed early in childhood and become relatively stable attributes of personality and are highly resistant to change. Monahan, Kuhn, and Shaver's (1974) and Solomon's (1975) research, on the other hand, demonstrated that a cultural interpretation is preferable to an intrapsychic one. Their research designs crossed subject and task factors: half of the men and half of the

women subjects wrote stories to a cue depicting a successful woman; the other half of both sexes wrote stories to a cue involving a successful man. Results from both of these studies indicated that both men and women projected more FOS imagery onto the successful woman than to the man, suggesting a cultural explanation: "the stereotypes surrounding women's achievements are negative ones, learned and accepted by both sexes" (Monahan, Kuhn, & Shaver, 1974, p. 61).

Additional Features Present in Cue

Level of Success Achieved

Once again, it was believed that sex of the character in the cue was the most critical variable. Amid the proliferation of studies, relatively few researchers have explored Horner's story-telling method in order to identify factors other than the cue character's gender that could contribute to the amount of projected FOS imagery. For example, the verbal lead or cue employed in much of the research on FOS depicted Anne and John at the top of their medical school class, and by implication, ranking first. Anne's and John's position in medical school, and not their gender, may be a salient feature of the cue. It is possible that subjects' responses reflect anxiety about the level of success achieved rather than anxiety about success in general. If this interpretation is correct, it means that responses to the "Anne" and "John" cue will be related only in those situations where the success is defined as "number one."

Paludi (1979) provided some clarification to this issue. She asked introductory psychology students to tell a story about Anne or John who ranked either at the top, in the top 5%, top 15%, top 25%, or top half of their medical school class. Analyses indicated that more negative imagery

was projected onto Anne by both men and women if she ranked very highly, than if she did not. Anne was depicted as being concerned, as Horner had argued, with social rejection and ostracism as a consequence of succeeding. In contrast to the results reported for the Anne stimulus, more negative imagery was projected onto John by subjects of both sexes if he ranked toward the middle of his class than if he did not. The "not too successful" John was characterized as unhappy and depressed over his inability to do well in medical school.

An important question that could be raised in regard to Paludi's study centers on the conditions defining varying positions for Anne and John in the bottom portion of the distribution of class ranks. Recently, Fogel and Paludi (Note 3) asked male and female introductory psychology students to tell a story about Anne or John who ranked in either the bottom half, bottom 25%, bottom 15%, bottom 5%, or bottom of their medical school class. More negative imagery was projected onto Anne by both sexes when she was at the bottom of her class than when she ranked in the bottom half. A similar pattern was noted for men and women who responded to the John cue, although a greater amount of negative imagery was present in protocols about John when he ranked at the bottom of his class than about Anne in this position.

If we extended the graph Paludi (1979) presented of her data to include the results of the present study, we would find that John's curve remained high (i.e., high frequency of negative imagery from the top 50% to bottom of the class), but Anne's to follow a U-shaped function of degree of "non-success" (with high frequency of negative imagery at the top of the class and again at the bottom of the class), not converging with John's at the point where both were depicted at the very bottom of the class.

It should be emphasized that the content of negative imagery in the protocols written about Anne and John in the present study was different from what Paludi (1979) observed. Whereas FOS may describe the negative imagery present in the protocols written about Anne at the top of her medical school class, fear of failure (Anderson, 1962) more adequately describes the imagery present in the protocols written about Anne at the bottom of her class: negative affect, discouragement, anticipation of future failure, and desire to leave the situation. Fear of failure also illustrates the content of the protocols written about John when he's ranked in the middle to bottom of his class.

The results of these studies constitute compelling evidence that success and also failure in competitive achievement situations is differentially perceived and evaluated according not only to sex of the cue character but also to the degree of success or failure obtained. These results also support Feather and Simon's (1975) finding that there is a pervasive tendency to (a) upgrade successful males in relation to unsuccessful males and (b) downgrade unsuccessful males in relation to unsuccessful females.

Occupation in which Success was Achieved

A second salient feature of Horner's FOS verbal cue may be the occupation in which Anne and John were successful. Feather and Simon (1975) observed that part of the definition of sex-roles in society involves assumptions about the types of occupations which are held to be appropriate for men and women. Success at an occupation is more highly valued when the success is consistent with societal conceptions about the sex-role than when it is

inconsistent. Thus, as Feather and Simon point out (p. 21): "the consequences of succeeding at medical school are more positive for males (success is consistent with masculine image) than for females (success is inconsistent with the feminine image.)" Therefore, because Horner's cue depicted Anne at the top of her medical school class, it can be hypothesized that protocols written by women reflected anxiety about success that is "out of place" for women (Tresemer & Pleck, Note 4).

Intuitively, this "sex-role inappropriateness" hypothesis would suggest that men, too, would project negative imagery onto a successful male cue character when the latter's success occurred in a nontraditional setting such as nursing. Such a result was obtained by Cherry and Deaux (Note 5), Feather and Simon (1975), Janda, O'Grady, and Capps (1978), and Tresemer and Pleck (Note 4). Therefore, in addition to the sex of the subject or protagonist being an important factor in Horner's study, "medical school," with its numerous connotations, may have been salient.

Ambiguous Cue

Another way to examine the "sex-role inappropriateness" explanation is to examine the effects of an ambiguous cue on the incidence of projected FOS imagery. Tresemer (1974) suggested that Horner's cue was too limiting and specific. As he pointed out, (p. 85): "Horner forced subjects to react to a narrow, focused concrete situation: a person is number one in a male-dominated field." Tresemer advocated a return to the traditional ambiguity characteristic of projective tests. The use of ambiguous cues would allow researchers, he argued, to observe subjects' personal perceptions of success. In that way, external factors, such as the specific connotations of externally imposed verbal cues, would not bias the subjects' protocols. To test his hypothesis,

Tresemer administered the following cues: "After much work, Joe (Judy) has finally gotten what he(she) wanted." Twenty-three per cent of the 110 male subjects and 22% of the 111 females projected FOS imagery onto the cue character. For women, this percentage represented significantly less FOS imagery than was reported in Horner's (1968) study. Perhaps FOS is not nearly as prevalent among women as Horner suggested.

Causal Attribution

However, there is the implication of the causal attribution of ability and effort ("after much work") in Tresemer's cue. Horner's Anne and John cue implied external attributional process: "finds her(him)self," as if it came as an unexpected surprise; from luck. The main objective of a recent study by Gravenkemper (Note 6) was to investigate the incidence of FOS imagery in men and women who were administered an ambiguous projective verbal cue free from the effort, ability, and luck implication: "John (Anne) has succeeded." In allowing subjects to define success for themselves, Gravenkemper hypothesized that (a) subjects would exhibit relatively little FOS imagery and (b) there would not be a significant difference in the amount of FOS projected by men and women. Gravenkemper's hypotheses were confirmed with 79 female and 64 male introductory psychology students. Results indicated that only 14.1% of the men and 7.6% of the women projected FOS imagery. It appears that when subjects are given the opportunity to define success for themselves, they project relatively little FOS imagery onto a cue character. It is interesting to note that Gravenkemper's subjects' stories centered around success in the following areas: school, job, and athletics.

On the basis of the studies reported above, Horner's conclusions are not warranted. Sex of subject is only one possible explanation for the results

obtained. Of course, it is still too early to state which of the other identified factors or combinations thereof are responsible for increased projected FOS imagery since (a) no attempt has been made to examine them simultaneously, and (b) researchers have not all employed the same scoring technique in analyzing protocols. Some have used Horner's (1968) simple present-absent scoring system (Hoffman, 1974; Monahan, Kuhn, & Shaver, 1974) while others have employed Horner's modified scoring system (Horner, Tresemer, Berens, & Watson, Note 7).[2] A third fantasy-based measure, designed by Paludi (Note 8)[3] has also been used (e.g., Fogel & Paludi, Note 3; Gravenkemper, Note 6). Therefore, whether or not the results obtained in studies of FOS are due to variations in the cue presentation or to differences in scoring systems, remains an open question.

ALTERNATIVE MEASUREMENT TECHNIQUES

A considerable amount of evaluation and controversy has been devoted to the interpretation of protocols written to projective verbal cues in FOS research. Because the projective verbal lead may be eliciting a reaction to its own superficial content rather than a direct expression of motive strength, several "objective" instruments designed to tap FOS have been developed. Most of the current tests of FOS use (a) true-false questions; (b) semantic differential items; (c) interview questions; and (d) situation-specific items.

True-False (Yes-No) Measures

Good and Good (1973) developed a 29-item, dichotomously scored, self-report measure of FOS. Their scale reflects the belief that FOS is

experienced by people who worry about antagonizing others as a result of succeeding. For example, "I sometimes do less than my very best so that no one will be threatened;" "I often worry about the possibility that others will think I am a 'show off';" "I worry that I may become so knowledgable that others will not like me;" "If I were to do well at something, I would worry that someone might try to undermine my success." Good and Good reported an internal-consistency reliability estimate (KR-20) of .81 for 103 male and 125 female undergraduate students. The authors also reported a significantly higher FOS score for females. They have not limited their items to FOS in academic situations, thus avoiding one of the pitfalls of Horner's approach. Good and Good's questionnaire was not, however, (a) correlated with Horner's fantasy-based measure of FOS, or (b) related to performance behavior. These two points will be subsequently discussed further.

Pappo (Note 10), incorporating the perspective of Henry Stack Sullivan, developed a Yes-No measure which purports to tap the following aspects of FOS: negative affective reaction ("If someone calls attention to me when I'm doing well, I often feel awkward."), repudiation of competence or motivation ("Persuasive people can influence my ideas."), sabotage of success ("As a game [card game, word game, chess, competitive sports, etc.] reaches the winning point, I start thinking about other things."), preoccupation with evaluation and competition ("I try the hardest when my work is being evaluated."), self-doubt and negative self-evaluation ("There are times when I don't think I have what it takes to be a success in the area I am interested in."), distractability and impairment of concentration ("Frequently at crucial points in intellectual discussions, my mind goes blank."). Pappo reported a KR-20 of .89 using a

sample of 115 male and 170 female undergraduate students. No significant sex difference in the way men and women answer the questionnaire was found. Concurrent validity was assessed for the Pappo scale by correlating it with three personality tests relevant to the characteristics of success-fearers: Rotter's (1966) Internal-External Scale, the Rosenberg Self-Esteem Scale (Rosenberg, 1965), and the Debilitating Anxiety Scale (Alpert & Haber, 1960). As hypothesized, Canavan-Gumpert, Garner, and Gumpert (1978) found people who fear success to be externals, have more negative self-esteem, and express anxiety in academic testing situations.

Pappo reported that her male and female subjects who had high FOS scores significantly lowered their performance on a digit-symbol task after they were debriefed about their performance on a previous task. Subsequent use of Pappo's questionnaire with law students by Curtis, Zanna, and Campbell (Note 11) indicated that men and women who scored high in FOS were more likely to indicate the desire to volunteer answers in their classes but not actually do so; performed less well on their law school admissions exam, and believed they were poor at logical reasoning and hypothesis testing. On the other hand, high FOS scorers did not perform poorly in their law courses, nor did they anticipate doing less well than were low FOS scorers.

Pappo's questionnaire, like Good and Good's has not been correlated with Horner's, nor any other FOS measure. Unlike the Good and Good measure, however, Pappo's scale is limited to fear of success in academic situations.

Cohen (Note 12) sought to improve upon Pappo's FOS scale by measuring anxiety about success in general, not solely academic achievement. It tests "the equation of accomplishment with competitive defeat of another" which

leads to fantasy retaliation by the defeated competitor. Cohen conceived of FOS as a defense against letting go, espousing a neo-Freudian orientation to psychodynamic phenomena. To her, FOS is based in the anal stage of development emphasizing concerns of control and fear of loss of control, shame, humiliation, and self-assertion vs. submission.

On the basis of a factor analysis of her 64-item, true-false scale, Cohen identified nine factors that were identified as characteristics of high FOS scorers: anxiety over the expression of needs and preferences ("It makes me feel uneasy to have to ask other people for things."), reluctance to acknowledge personal competence ("I generally feel uptight about telling a boss or professor that I think I'm entitled to a better deal."), impaired concentration and distractability ("I have often 'woken up' during a lecture of a meeting and realized that I haven't heard a word that was said"), indecisiveness ("It pays to check out your ideas with other people before making a final decision."), safety value syndrome - fear of loss of control ("It's important not to get too excited about things one really desires."), illegitimacy of self-promotive behavior ("I sometimes have trouble acting like myself when I'm with people I don't know."), anxiety over being the focus of attention ("I hate having a fuss made over me."), preoccupation with competition and evaluation ("When someone I know well succeeds at something, I usually feel that I've lost out in comparison."), preoccupation with the underplaying of effectiveness ("I sometimes 'play down' my competence in front of others so they won't think I'm bragging.").

Cohen reported an insignificant difference between her mean FOS scores for her 88 male and 150 female undergraduate students. She also reported a

(a) KR-20 split-half reliability coefficient of .90; (b) correlation between her scale and Pappo's (Note 10) of .74; (c) those high FOS scorers in a validation experiment (241 high school juniors and seniors) more often devalued their performance, attributed effective performance to luck, and performed worse when paired with a same-sex opponent on a memory task. This last result supported Cohen's theoretical prediction: FOS is linked with recurrent Oedipal conflict and is symbolically associated with a same-sex peer.

Both Pappo and Cohen conceived of FOS in a different way than did Horner. Zuckerman and Allison (1976), however, accept much of Horner's conceptual foundation for FOS. Zuckerman and Allison developed a 27-item, agree-disagree Fear of Success Scale (FOSS) and found significantly more responses indicative of FOS in women than in men. Items dealt with only one aspect of success: success in competition. For example, "The rewards of a successful competition are greater than those received from cooperation;" "I am happy only when I am doing better than others;" "Often, the cost of success is greater than the reward;" "I believe that successful people are often sad and lonely." Zuckerman and Allison reported significant, but low, correlations between their scale and Horner's both for the 174 male (.16) and 170 female subjects (.18). In addition, subjects who scored "high FOS" performed significantly lower on an anagram task and attributed their success to external causes and their failure to internal causes.

Zuckerman and Allison did not relate their scale to any other indices of behavior or other tests (e.g., fear of failure).

Semantic Differential Items

Feather and Simon (1975) asked 48 female subjects to use semantic scales to rate males and females who succeeded (or failed) at different occupations (medicine or nursing) on three matters of concern: personality (e.g., pleasant/unpleasant; logical/intuitive; tough/tender), causal attribution of the success or failure (e.g., ability, examiner's error, luck), and perceived likelihood of various consequences (e.g., Anne [John] feels thoroughly contented; wonders if it is all worthwhile; continues to top the class). Feather and Simon's subjects (a) upgraded successful males in relation to unsuccessful males and (b) devalued successful females in relation to unsuccessful females. Their semantic differential scales were not correlated with Horner's measure and their items were based on a cue limited to fear of success in academic settings. The first problem was attacked experimentally by Paludi (Note 18). She extended Feather and Simon's design by also administering Horner's story-telling method in conjunction with the semantic differential scales and found no correlation between the two measurement techniques.

A 10-item questionnaire with similar questions to Feather and Simon's has been developed by Spence (1974). She asked her subjects to answer the items following completion of their story-telling task. Questions run the gamut from "How likeable do Anne's classmates consider her?" (answered on a 5-pt. scale) to "How physically attractive is she?" and "If she doesn't complete her degree, what is the most likely reason?" (answered from responses provided from protocols written to the projective cue). Knapp (Note 13) designed a similar questionnaire to be used in conjunction with

Horner's medical school cue with items as follows:

Anne is:

abnormal - probably not very feminine

YES! yes ___?___ no NO!

happy but surprised she did so well (feels luck played a part)

YES! yes ___?___ no NO!

An Interview Measure of FOS

One part of Horner's results which merits consideration is the assumption of the acquisition of FOS: its origins, or even how it may be eliminated. Thus, the main objective of a series of studies by Paludi (Note 14) concerns the development of an interview measure designed to elicit success and FOS themes and to identify personal, peer, and parental influences on these themes. The interview items Paludi has been using with women aged 20 to 63 are adapted from McClelland and Winter's (1971) research on motivating economic achievement:

What, specifically, do you want to accomplish in the next two years?

What specific steps do you plan to take to achieve these goals?

What blocks in yourself will you have to overcome to achieve these goals?

What blocks in the world will you have to overcome in order to achieve these goals?

How do you feel about the possibility of achieving these goals?

How do your parents feel about you achieving these goals?

How do your men acquaintances feel about you achieving these goals?

How do your women acquaintances feel about you achieving these goals?

How does your spouse feel about you achieving these goals?

Have you ever been in a situation where you were about to succeed at something, and wondered if it was worth it or got afraid of your success or something it might produce?

Paludi has reported that the interview items have elicited information not readily attainable from Horner's fantasy-based measure. Her interview responses are inconsistent with her female subjects' rejection of Anne at the top of her medical school class. A major theme that has resulted from this technique concerns a reformulation of Horner's theory--FOS is not deep-seated in women's personality, but, on the contrary, situationally determined. Women may not internalize the motive at a very early age. On the contrary, it may be that women evaluate their behaviors in the light of the specific situation, sometimes acting in accord with sex-role norms, sometimes not. Women may consciously sum up e[illegible]uation as it presents itself and either engage in sex-appropriate "failure" behaviors or demonstrate achievement-oriented skills. Women's behavior may also be fundamentally influenced by social aspects of the situation. Women may be role calculating--making the most of their rewards. Some excerpts of the women's interviews are as follows:

> The more I've achieved, the more I've been isolated, the more I've been perceived as different. The more I've been perceived as different, the more I perceive myself as different.

> One of my biggest goals is going to overcome my fear of aggressive men. When they say something detrimental about my work--not letting it upset me. For some reason, a woman can say something about my work...and I wouldn't care. But if a male says it to me, it destroys me. Even though I'm right, if they tell me I'm wrong, I believe it. I have to believe in myself as a worthwhile person and as

an equal to aggressive males. And, another thing is the fact that to a certain degree, I'm attractive and that doesn't help. Men don't care if I could think or not. A lot of people are unwilling to believe that an attractive person can have a brain.

I feel confident. I am intelligent. After all, I was married ten years when I began my college career. I have earned two degrees, raised three children, taught full time, managed my home. I can do anything. I strongly want to achieve my goals. My women acquaintances are chicken. They think I'm nuts. My men acquaintances love my work.

Many women are jealous of me because I am going to school. They laugh at me. They are probably afraid of changing their lives. I can't talk about anything important because they are not interested in the same things I am. Most men think it's terrific. They understand why I'm going to college but they don't understand why I don't have time to date them.

I've never been afraid of my successes, although I have succeeded at something and wondered if it was worth it. I can work toward success and/or a goal and achieve it and then it's done and I'm proud, but something is always missing. I guess I expect fireworks to go off. I like to succeed at something, but then, on the other hand, it seems like after it's done, it was no big deal after all.

I have to admit I have worried about my family's reaction to my success in an outside situation, necessitated by being out of town for extended periods of time. I decided I cannot do both, so opted for my family's needs/desires to be fulfilled first by me. They have first call upon me now. One most vocal about the situation was my oldest daughter, who consciously seemed to feel she'd have to take my place, and she did not want to. I felt it was selfish of me not to finish the job of raising children in the best way I knew how.

Paludi's (Note 15) interview measure is currently undergoing technical psychometric work that will refine it and make it more efficient by eliminating spurious questions and including questions that increase its accuracy. An advantage of such a measure is that information can be elicited on all the issues of concern by devising appropriate interview items, a kind of control not afforded by Horner's story-telling method.

Situation-Specific Items

Amid the measurement proliferation, relatively few experimenters have explored the relationship of FOS to performance behavior: do those who fear success on a projective or objective test avoid success in achievement situations?

Makosky (Note 16) has provided some clarification to this issue. She observed that women who score high on FOS do not fear to compete in general; only in those instances where the task is considered "masculine" or where competition is against a man. "High" FOS women were so classified on the basis of their responses to the story-telling cue used initially by Horner. Makosky's results are limited by the measurement technique, considering the criticisms of the projective cue discussed earlier. In addition, the FOS measure used in her studies was unrelated to the performance task: solving anagrams. There is, therefore, a need for a situation-based paper and pencil measure of FOS to be used in predictive validity research (which will be discussed further in a subsequent section).

The main objective of an initial study in a series of experiments designed by Schulenberg (Note 17) concerned the development of a situationally based measure of FOS. He wrote 11 scenarios to comprise a situation-specific

inventory assessing FOS and then administered the instrument in conjunction with the projective verbal cue to 50 male and 50 female introductory psychology students. In writing the scenarios. Schulenberg assumed (as did Horner) that the feared negative consequences for success are deviation from social norms and stereotypes (e.g., loss of femininity). Examples of scenarios employed by Schulenberg are as follows:

> You have just been notified that you have won an award as the outstanding undergraduate student at your college. A prize-day ceremony will be held. You:
>
> a. are proud and are eager to attend the ceremony
> b. don't feel like attending the ceremony
> c. feel indifferent

> You and your boyfriend (girlfriend) are taking freshman English together. As the professor passes back the midterm exams, you notice that your boyfriend (girlfriend) got a B. You, however, got an A. When your boyfriend (girlfriend) asks what you got on the exam, you say:
>
> a. I got an A!!
> b. I did O.K.
> c. I got a C.

> Recently, you've met a young man (lady). You like him (her) and would like to get to know him (her) better. One day, you both decide to go play some racquetball. As you warm up, it becomes obvious that he (she) is not real good. You feel that you could beat him (her) quite easily. Since you just met him (her), you're not sure how he (she) would react to losing. You play one game and win 21 to 4. He (She) wants to play some more and suggests a little tournament in which the winner of two out of three games would be the champion. You would:
>
> a. let him (her) win the next two games
> b. win the second game to end the tournament
> c. let him (her) win the second game, but you would win the third game

You and your girlfriend (boyfriend) have applied to a highly select medical school. She (He) gets accepted. You, however, do not. You:

a. congratulate her (him) and are happy for her (him)
b. feel indifferent
c. are angry and resentful

Coding of the scenarios was accomplished using the following scale: an alternative indicative of the FOS response (determined by Paludi's, Note 8, scoring system) received a score of 3; a neutral score received a score of 2; a non-FOS response received a score of 1. Schulenberg reported a significantly higher mean score for the females than for the males. It should be pointed out, however, that both men's and women's scores were closer to "2" -- the neutral response -- than to "1" or "3".

A Pearson Product Moment Correlation coefficient performed on the scores from the projective FOS measure and from Schulenberg's test revealed virtually no relationship for men or for women. To date, the Schulenberg scale has not been validated with any performance measure.

RELIABILITY, VALIDITY, AND THE REALITY STATUS OF THE FEAR OF SUCCESS CONSTRUCT

The wide differences in how FOS has been measured has resulted in a "now-you-see-it-now-you-don't" phenomenon (Alper, 1974). A review of 64 studies (Paludi, Note 19) revealed that the percentage of subjects exhibiting FOS has ranged from 6% to 93% in females with a median of 49%, and from 7% to 95% in males, with a median of 46%. In addition, measure reliability of both the fantasy-based and objective techniques has been inconsistent.

Test-retest reliability for the fantasy-based FOS measure has been low (Moore, Note 9; Paludi, Note 19). In addition, the majority of studies

employing Horner's story-telling method have only administered the single medical-school cue. Those experimenters who did administer several cues to the same subjects either (a) failed to report the homogeneity reliability (e.g., Karabenick & Marshall, 1974; Weston & Mednick, 1970) or (b) reported low correlation coefficients (e.g., Morgan & Mausner, 1973).

Intertester reliability for the story-telling techniques has ranged between 80-96%. However, not all investigators using the fantasy-based method have used the same scoring system. In addition, it is likely that FOS scores reflect the judges' gender (Robbins & Robbins, 1973), and their expectancies (Levine & Crumrine, Note 20). Finally, Tresemer (1974, 1977) suggested that judges have incorrectly rated all negative themes in a subject's protocol as evidence of FOS; thus, failing to take into account the theoretical basis of FOS: that success will bring negative consequences. Therefore, serious methodological flaws exist in the scoring of FOS protocols.

Measure reliability for the newer FOS measurement techniques has either (a) usually not been analyzed and/or reported (e.g., Feather & Simon, 1975; Gravenkemper, Note 6; Schulenberg, Note 17) or (b) has been reported in terms of a split-half coefficient (e.g., Cohen, Note 12).

Likewise, the fantasy-based and objective FOS measures have not been properly validated. Neither Horner nor other users of the story-telling method (e.g., Hoffman, 1974; Monahan, Kuhn, & Shaver, 1974) have compared FOS themes of an aroused and nonaroused group of subjects. Concurrent validity has been assessed by Pappo (Note 10); construct validity by Paludi (Note 21) and Schulenberg (Note 17); predictive validity by Cohen (Note 12), Makosky (Note 16), Pappo (Note 10), and Zuckerman & Allison (1976). Overall, it may

be concluded that various validity experiments have not shown consistent interactions with FOS. This is, perhaps, a result of the fact that not all researchers have conceptualized FOS similarly.

According to Horner, the feared negative consequences for success are deviation from social norms and stereotypes. This is the same theoretical basis underlying Schulenberg's (Note 17) situation-specific technique and Zuckerman and Allison's (1976) FOSS. Pappo's (Note 10) and Cohen's (Note 12) questionnaires are couched in the psychoanalytic approach to FOS: the feared negative consequences are the defeat over one's defenses against murderous rage or Oedipal success. This is similar to an approach recently espoused by Friedman (1980). In addition, the new FOS measures deal with either (a) academic, competitive success (e.g., Pappo, Note 10); or (b) success in general (e.g., Good & Good, 1973; Paludi, Note 14; Schulenberg, Note 17). Thus, it should come as no surprise that the newer objective scales have not been found to be related to Horner's projective FOS measure.

The new FOS scales are very appealing because they appear to resolve many of the problems reported in past studies with Horner's measure. It would be premature to switch to any of the newer FOS measures. Each has its own limitations and should not be so widely accepted until a sound and replicable body of research exists. As Tresemer (1977) pointed out: "In embracing any of these new measures, there is a danger of repeating the misunderstandings about Horner's measure with a new instrument. It has been clearly demonstrated that the phrase 'fear of success' attracts attention, but that any one scale 'measures' a person's individual fear any better than another cannot, at this point, be known" (p. 171).

Is there a fear of success? Do women fear success? The popularity of the construct is based partially on the belief that FOS has a substantial impact on women's lives and professional careers. There is little evidence to support this assertion. Even if FOS were a valid motive, it does not appear to be a motive experienced uniquely by women. Fear of success cannot, therefore, be easily used as an explanation for men and women's differential achievements. One cannot conclude from the research to date that FOS acts as a counterforce against women's or men's tendency to achieve. Too many methodological, conceptual, and statistical flaws inherent in FOS research preclude calling FOS a motive, a proven personality trait. In addition, experiencing anxiety over success may not be pathological, but normative; part of one's development (Sassen, 1980)

Based on a review of subsequent studies to Horner's original experiment, the following conclusions may be stated:

(a) Fear of success and sex-role orientation appear to be unrelated.

(b) No reliable age or sex differences in fear of success have been observed.

(c) It is not clear whether fear of success taps a motive or cultural stereotype.

(d) The reliability of the measures of fear of success is low.

(e) There has been no consistent relationship between fear of success and any behavioral measure.

(f) No consistent relationship between fear of success and achievement-related variables has been observed.

(g) There is inconsistent evidence to support the assertions that fear of success has been decreasing for women and increasing for men.

(h) Fear of success has shown no relationship to ability (in the form of SAT scores, GPA, IQ, career goals) in women.

(i) Inconsistent data exists to support the assertions that fear of success is less likely among black women and more likely among black men.

It would, therefore, appear to be desirable to abandon the label FOS since its continued use serves only to reinforce the popular and widespread, but scientifically unfounded, idea that sex differences in occupational or academic participation are attributable to an intrapsychic difference between men and women, and thus serve to blame the victim. To date, fear of success has failed. To the extent that newer methodological advances can be empirically integrated with FOS, subsequent research and theory would increase in precision.

Reference Notes

1. Schwenn, M. Arousal of the motive to avoid success. Unpublished junior Honors thesis, Harvard University, 1970.
2. Zanna, M. P. Intellectual competition and the female student (Report to the U. S. Department of Health, Education, and Welfare). Princeton, New Jersey: Princeton University, 1973.
3. Fogel, R., & Paludi, M. A. Fear of success and failure or norms for achievement? Paper presented at the 6th Annual Conference on Research on Women and Education, Pacific Grove, California, December, 1980.
4. Tresemer, D. W., & Pleck, J. Maintaining and changing sex-role boundaries in men (and women). Paper presented at the Women: Resource for a Changing World Conference. Radcliffe Institute, Cambridge, Massachusetts, April, 1972.
5. Cherry, F., & Deaux, K. Fear of success versus fear of gender-inconsistent behavior: a sex similarity. Paper presented at the Annual Meeting of the Midwestern Psychological Association, Chicago, 1975.
6. Gravenkemper, S. A. Fear of success revisited: Introducing an ambiguous cue. Paper presented at the Fifth Annual Conference on Research on Women and Education, Cleveland, Ohio, 1979.
7. Horner, M. S., Tresemer, D. W., Berens, A. E., & Watson, R. I., Jr. Scoring manual for an empirically derived scoring system for motive to avoid success. Unpublished manuscript, Harvard University, 1973.
8. Paludi, M. A. Scoring manual for fear of success imagery. Unpublished manuscript, University of Cincinnati, 1978.

9. Moore, K. A. Fear of success: The distribution, correlates, reliability and consequences for fertility of fear of success among respondents in a metropolitan survey population. Paper presented at the Meeting of the American Psychological Association, New Orleans, August, 1974.

10. Pappo, M. Fear of success: An empirical and theoretical analysis. Unpublished doctoral dissertation, Teachers College, Columbia University, 1972.

11. Curtis, R., Zanna, M. P., & Campbell, W. W. Sex, fear of success, and the perceptions and performance of law school students. Unpublished manuscript, Adelphi University, 1973.

12. Cohen, N. E. Explorations in the fear of success. Unpublished doctoral dissertation, Columbia University, 1974.

13. Knapp, J. J. Fear of academic success: A comparison of academically above-average, single, male and female college students. Unpublished Master's thesis, University of Florida, 1972.

14. Paludi, M. A. On the measurement of success and fear of success. Paper presented at the Fifth Annual Conference on Research on Women and Education, Cleveland, 1979.

15. Paludi, M. A. Unpublished data, Franklin and Marshall College, 1980.

16. Makosky, V. P. Fear of success, sex-role orientation of the task, and competitive condition as variables affecting women's performance in achievement-oriented situations. Paper presented at the Annual Meeting of the Midwestern Psychological Association, Cleveland, May, 1972.

17. Schwenberg, J. E. Toward the development of a situationally based measure of fear of success: Initial findings. Paper presented at the Sixth Annual Conference on Research on Women and Education, Pacific Grove, California, December, 1980.

18. Paludi, M. A. Impact of androgynous and traditional sex-role orientations on reactions to successful men and women in sex-linked occupations. Unpublished Master's thesis, University of Cincinnati, 1978.

19. Paludi, M. A. Unpublished data, University of Cincinnati, 1979.

20. Levine, A., & Crumrine, J. Women and the fear of success: A problem in replication. Paper presented at the Meeting of the American Sociological Association, New York, August, 1973.

21. Paludi, M. A. Unpublished data, University of Cincinnati, 1980.

References

Alper, T. G. Achievement motivation in college women: A now-you-see-it-now-you-don't phenomenon. American Psychologist, 1973, 29, 194-203.

Alpert, R., & Haber, R. N. Anxiety in academic achievement situations. Journal of Abnormal and Social Psychology, 1960, 61, 207-215.

Anderson, R. C. Failure imagery in the fantasy of induced arousal. Journal of Educational Psychology, 1962, 53, 293-298.

Canavan-Gumpert, D., Garner, K., & Gumpert, P. The success-fearing personality. Lexington, Massachusetts: D. C. Heath & Co., 1978

Feather, N. T., & Simon, J. G. Reactions to male and female success and failure in sex-linked occupations: Impressions of personality, causal attributions and perceived likelihood of different consequence. Journal of Personality and Social Psychology, 1975, 68, 119-128.

Friedman, M. Overcoming the fear of success. N. Y.: Seaview, 1980.

Good, L. R., & Good, K. C. An objective measure of the motive to avoid success. Psychological Reports, 1973, 33, 1009-1010.

Hoffman, L. W. Fear of success in males and females: 1965 and 1972. Journal of Consulting and Clinical Psychology, 1974, 42, 353-358.

Hoffman, L. W. Fear of success in 1965 and 1974: A follow-up study. Journal of Consulting and Clinical Psychology, 1977, 45, 310-321.

Horner, M. S. Sex differences in achievement motivation and performance in competitive and noncompetitive situations. Unpublished doctoral dissertation, University of Michigan, Ann Arbor: University Microfilms, 1968.

Horner, M. S. Fail: bright women. Psychology Today, 1969, 3, 36-38,62.

Janda, L. H., O'Grady, K. E., & Capps, C. F. Fear of success in males and females in sex-linked occupations. Sex Roles, 1978, 4, 43-50.

Karabenick, S. A., & Marshall, J. M. Performance of females as a function of fear of success, fear of failure, type of opponent, and performance-contingent feedback. Journal of Personality, 1974, 42, 220-237.

McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. The achievement motive. N. Y.: Appleton-Century-Crofts, 1953.

McClelland, D. C., & Winter, D. G. Motivating economic achievement. N. Y.: Macmillan, 1971.

Midgley, N., & Abrams, M. S. Fear of success and locus of control in young women. Journal of Consulting and Clinical Psychology, 1974, 42, 737.

Monahan, L., Kuhn, D., & Shaver, P. Intrapsychic vs. cultural explanations of the fear of success motive. Journal of Personality and Social Psychology, 1974, 29, 60-64.

Morgan, S. W., & Mausner, B. Behavioral and fantasied indicators of avoidance of success in men and women. Journal of Personality, 1973, 41, 457-469.

Paludi, M. A. Horner revisited: How successful must Anne and John be before FOS sets in? Psychological Reports, 1979, 44, 1319-1322.

Patty, R., & Ferrell, M. M. A preliminary note on the motive to avoid success and the menstrual cycle. Journal of Psychology, 1974, 86, 173- 77.

Robbins, L., & Robbins, E. Comment on "Toward an understanding of achievement-related conflicts in women." Journal of Social Issues, 1973, 29(1), 133-137.

Rosenberg, M. Society and the adolescent self-image. Princeton, N. J.: Princeton University Press, 1965.

Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychology Monographs, 1966, 80, (Whole No. 609).

Sassen, G. Success anxiety in women: A constructivist interpretation of its source and significance. Harvard Educational Review, 1980, 50, 13-24.

Solomon, L. Z. Perception of a successful person of the same sex or the opposite sex. Journal of Social Psychology, 1975, 85, 133-134.

Spence, J. E. The thematic apperception test and attitudes toward achievement in women: A new look at the motive to avoid success and a new method of measurement. Journal of Consulting and Clinical Psychology, 1974, 42, 427-437.

Tresemer, D. W. Fear of success: Popular but unproven. Psychology Today, 1974, 7, 82-85.

Tresemer, D. W. Fear of success. N. Y.: Plenum Publishers, 1977.

Weston, P. J., & Mednick, M. T. Race, social class, and the motive to avoid success in women. Journal of Cross-Cultural Psychology, 1970, 1, 284-291.

Wooley, H. T. Psychological literature: A review of the recent literature on the psychology of sex. Psychological Bulletin, 1910, 7, 335-342.

Zuckerman, M., & Allison, S. N. An objective measure of fear of success: Construction and validation. Journal of Personality Assessment, 1976, 40, 424-427.

Zuckerman, M., & Wheeler, L. To dispel fantasies about the fantasy-based measure of fear of success. Psychological Bulletin, 1975, 82, 932-946.

Footnotes

[1]Portions of this paper were presented at the 7th Annual Conference on Feminist Psychology, Los Angeles, March, 1980, and the 6th Annual Conference on Research on Women and Education, Pacific Grove, California, December, 1980.

[2]Each protocol is judged on six categories with numerical weights assigned to each category: (a) contingent negative consequences (+2); (b) noncontingent negative consequences (+2); (c) interpersonal engagement (+2); (d) relief (+1); (e) absence of instrumental activity (+1); (f) absence of mentions of other people (-2).

[3]The scoring manual is modeled after the Atkinson/McClelland manual for scoring achievement motivation. It describes in detail what is meant by fear of success by specifying which kinds of projective imagery should be taken as illustrative of fear of success and which kind of imagery should not. Included are sample protocols written to various cues--both ambiguous and situation-specific--and an accompanying discussion as to why they were scored as they were. Proper use of the training manual should allow the novice scorer to learn to become an expert with good reliability. The training materials include: (a) sample stories written to a variety of cues; (b) detailed scoring of the protocols; (c) explanations of details of scoring; (d) instructions for computing the reliability of the novice scorer to that of the author. The scoring criteria for fear of success imagery were derived from the literature and represent extensions of the categories developed by Horner.